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An Overview of the Working Lives of Older Baby Boomers

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0^s	value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
p	preliminary
r	revised
x	suppressed to meet the confidentiality requirements of the *Statistics Act*
E	use with caution
F	too unreliable to be published
*	significantly different from reference category ($p < 0.05$)

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Abstract

Using longitudinal data on earnings and employment over a 28-year period, this paper provides summary information on the employment histories of individuals who were aged 33 to 38 in 1983 and aged 60 to 65 in 2010. The longest observed duration of employment is used as an organizing framework, with summary measures presented on indicators such as years of employment, job turnover, annual and cumulative earnings, permanent and temporary layoffs, and years of pensionable service. Cohort members are loosely categorized as 'marginally attached workers', 'mobile workers', or 'long-term-job holders' according to their employment characteristics, with about one-tenth, one-quarter, and two-thirds of cohort members in these groups, respectively. Finally, evidence indicates that there has not been any decline in the incidence of long-term employment over time or, conversely, any increase in the frequency of job changes.

Keywords: retirement, life course, employment stability, older workers

Executive summary

With the leading edge of the baby boom generation now in their mid-sixties, there is considerable interest in how and when these individuals will retire. To help place this issue in a broader context, this paper provides information on the employment histories of individuals who were aged 33 to 38 in 1983 and aged 60 to 65 in 2010.

The longest duration of employment held by these individuals is the central organizing concept for the analysis. Workers are categorized according to the longest job in which they are observed over the 28-year period, with summary measures provided on their years employed, annual earnings, cumulative earnings, job turnover, layoffs, pensionable service, and other characteristics.

Beginning with individuals whose longest job lasted five years or less, summary measures indicate that their labour force attachment was typically quite limited. Individuals in this group had earnings of $1,000 or more in about 7 to 9 years of the 28 years. By definition, all jobs were fairly short, with the longest job averaging 3.3 years and the second-longest averaging about 2.5 years. Over half (57%) of all jobs held by individuals in this group were observed for no more than one year. Individuals in this group typically exited their longest job at age 45, and were last observed with earnings at about 49 years of age. Cumulative earnings over the 28-year period were modest, about $111,200 and $57,000 at the median among men and women, respectively. Overall, this group—termed 'marginally attached workers'—accounted for about 10% of individuals in the cohort.

Individuals whose longest job was observed for 6 to 11 years differ in important ways from the marginally attached workers above. Although the average duration of their longest job was less than 9 years, individuals in this group had fairly sustained involvement in the workforce. On average, they had earnings of $1,000 or more in almost 20 of the 28 years, and were last observed with earnings at about 58 years of age. In spite of this workforce attachment, individuals in this group typically worked for almost nine different employers over the period. In this respect, they experienced considerable employment mobility. Some of their jobs ended involuntarily, with layoffs more prevalent among men than among women. On average, men in this group experienced 2.8 permanent layoffs and 2.6 temporary layoffs over the period, and received Employment Insurance income in 5.7 years. During the years they worked, average annual earnings at the median in this group were around $36,200 among men and $19,500 among women. Further up the earnings distribution (80th percentile), men appear to have fared better with average annual earnings of about $60,300. Overall, individuals in this group—termed 'mobile workers'—had sustained workforce participation and relatively high job mobility over much of their working lives. They accounted for about 25% of employed individuals in the cohort.

Finally, about two-thirds of the individuals in the cohort were 'long-term-job holders', identified as those whose longest job lasted 12 years or more; in fact, most worked for the same firm or organization for far longer, often 20 years or more. Long-term-job holders typically worked for about three to six different employers over the period. Their working lives were generally characterized by considerable stability, as most individuals in this group (over 50%) did not experience any permanent or temporary layoffs over the 28-year period. Annual and cumulative earnings were considerably higher among this group than among mobile workers. Moreover, while mobile workers typically accumulated 3 to 4 years of pensionable service over the 20 years for which data are available, longer-term-job holders typically accumulated 7 to 13 years. Among men, about three-quarters of those in long-term jobs were employed in the private sector, while about one-quarter were employed in the public sector (i.e., federal, provincial, or municipal government) or the near-public sector (i.e., education, health care, and social

services). The public and near-public sectors were more significant sources of long-term employment for women in the cohort.

Finally, evidence suggests that there has not been any decline in the incidence of long-term employment over time or, conversely, any increase in the frequency of job changes.

1 Introduction

While decisions about when and how to retire are made towards the end of one's working life, these decisions are shaped and constrained by the circumstances, choices, and events encountered over a life time. Accumulated wealth at age 55 or 60, for example, reflects employment choices and opportunities, savings decisions, public institutions, and macroeconomic conditions over previous decades. In the language of the life course perspective, "...to understand behaviour at any one life stage requires knowledge of prior transitions and trajectories" (Han and Moen 1999, p. 197). In this respect, information on the employment experiences and transitions of individuals over their working lives is relevant to understanding their retirement choices and options later on.

With the leading edge of the baby boom generation now in their mid-sixties, there is considerable interest in how and when these individuals will retire. To help place this issue in a broader context, the objective of this paper is to provide information on the employment histories of these individuals over a substantial portion of their working lives. Drawing on the strengths of the administrative data being used, the analysis is organized around the concepts of job tenure and employment mobility, and examines the employment history which older baby boomers are transitioning into retirement. The main questions are the following:

1. What proportion of baby boomers are approaching retirement after having spent most of their careers or working lives in long-term employment with a single firm or organization? Conversely, to what extent have the working lives of older baby boomers been characterized by job mobility?
2. How do the financial characteristics of individuals with low and high levels of job mobility compare?
3. Is long-term employment becoming less prevalent?

This focus on employment duration is warranted for several reasons. First, long-term employment (or career jobs) is often the conceptual and empirical starting point for discussions of retirement transitions. Traditional (male) retirement, for example, is often understood as a single, clearly demarcated exit from long-term employment, while bridge jobs are typically defined as paid positions taken "...after an older worker has officially retired **from a long-term** career job, but before...complete withdrawal from the workforce..." (Dendinger et al. 2005, p. 22—emphasis added). Second, employment duration has implications for the expectations and certainty regarding retirement. For example, after controlling for a wide range of factors, including pension coverage and income, Ostrovsky and Schellenberg (2008) found a positive correlation between job tenure and plans for early retirement, certainty regarding retirement plans, and confidence in the adequacy of retirement savings. Similarly, Han and Moen (1999) found a positive correlation between orderly careers and both the expected and actual timing of retirement (p. 224). Third, employment duration and mobility are relevant to current discussions regarding Canada's retirement income system. The portability of retirement savings vehicles and the extent to which they meet the needs of a mobile workforce is a salient theme in this discussion. How long individuals work for a single firm, or conversely, how often they change employers, is relevant in this context.

The longest duration of employment held by individuals is the central organizing concept in this analysis. Workers are categorized according to the longest job in which they are observed during a 28-year period with summary measures provided on their annual earnings, cumulative earnings, job turnover, layoffs, and pensionable service. The goal is to better understand the circumstances in which older Canadians are making retirement decisions.

The remainder of the paper is organized into several sections. Following a discussion of the data, sample selection, and key concepts in Section 2, a descriptive profile of employment histories is provided in Section 3. In Section 4, multivariate results examining whether employment duration has changed across successive cohorts of older workers is presented. Conclusions follow in Section 5.

2 Data source, sample, and key concepts

Data source

The Longitudinal Worker File (LWF) is an administrative database designed to provide information on employment dynamics in Canada. It is based on a 10% random sample of Canadian workers, and contains information on their demographic and income characteristics, on the jobs they hold, and on the firms in which they work. The LWF is longitudinal, providing information from 1983 to 2010.[1] The LWF's longitudinal structure, coupled with information allowing workers' movements from employer to employer to be identified, makes the LWF particularly well-suited to studying employment transitions over the life course. The long reference period, large sample size, and high-quality earnings data are further strengths.

Despite its strengths, a limitation of the LWF is that it does not contain information on some personal characteristics generally included in retirement studies, such as health status, occupation, and educational attainment. Consequently, the extent to which variations in employment outcomes are attributable to these characteristics cannot be specified. Similarly, information is not available on the number of hours worked each week or the number of weeks worked each year. Hence, earnings for each job held are observed on an annual basis only, and employment transitions must be defined on an annual, rather than monthly, basis. Furthermore, the LWF is structured using jobs and individuals as the units of analysis; information on the employment or earnings of couples or households is not available. Hence, individuals who are identified as having sporadic labour force attachment or low annual earnings may (or may not) be married to a higher-earnings spouse. Finally, although the LWF can be used to estimate individuals' cumulative earnings and years of pensionable service, it does not contain direct measures of wealth, retirement savings, or the adequacy of retirement preparations. The issues are beyond the scope of this paper.

Sample and key concepts

The sample consists of Canadians who were aged 33 to 38 in 1983. These individuals comprise the first wave of the baby boom generation, born between 1945 and 1950 and reaching age 60 to 65 in 2010.[2] They were in their mid-thirties at the beginning of the reference period and by that point had likely completed their postsecondary education and made their way through entry-level positions at the start of their careers. Over the next 28 years they were in the prime of their working lives, and by the end of the period were close to retirement or had already retired.

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1. The LWF is constructed by integrating data from four sources. First, information on the demographic characteristics and information on certain financial characteristics of individuals is drawn from T1 personal taxation files. Among these variables are sex, age, marital status, and annual net self-employment income. Second, information on the jobs held by individuals is drawn from T4 records. This includes information on earnings and union dues associated with each job. Third, information is drawn from the Record of Employment that employers submit to Human Resources and Skills Development Canada (HRSDC) when an employee working in insurable employment has an interruption in earnings. This includes information on the start date and end date of the job and the reason for job termination. Finally, information is drawn from the Longitudinal Employment Analysis Program of Statistics Canada. This includes information on the business enterprise in which jobs are located, including the estimated size of the business and the industry in which the business is located.
2. Individuals aged 33 to 38 in 1983 who died within the reference period are excluded.

Given the objective of the analysis, the sample is limited to individuals who had at least some employment at the start of the reference period; specifically, those who had T4 slips issued by their employers or reported non-zero net self-employment income on their T1 tax form in any **one** of 1983, 1984, 1985, or 1986. Some 11% of men and 20% of women were excluded on this basis. From the remaining sample, individuals who died between 1983 and 2010 (as indicated on their T1 tax files) were excluded, representing some 8% of men and 5% of women. Comparisons with Census-based population estimates show that the resulting sample comprises 86% of the total population in that age range (Table 1).[3] It is also important to point out that the sample excludes immigrants in the same birth cohort who had employment income in Canada only after 1986. It is also impossible to identify individuals who may have worked in Canada in the early 1980s but subsequently left the country to work abroad for any number of years. These individuals remain in the sample.

Table 1
Sample size

	Aged 33 to 38 in 1983	
	Men	Women
	number	
With employment earnings during first four years of reference period[1] (sample size multiplied by 10)	1,097,000	938,100
Population estimate, July 1, 1983[2]	1,194,000	1,169,100

1. Based on data from the Longitudinal Worker File.
2. Based on data from CANSIM table 051-0001.

Note: Estimates rounded to the nearest 100. Employment earnings defined as employment income listed on T4 tax forms or non-zero net self-employment income reported on T1 tax forms.
Sources: Statistics Canada, Longitudinal Worker File and CANSIM table 051-0001.

The observed duration of employment spells is the central organizing concept for the analysis. An employment spell is the number of consecutive years an individual is observed receiving T4 earnings from a specific firm or organization or income from self-employment.[4] The variable has an observed range of 1 to 28. The calculation of duration in this study allows for one-year breaks in employer-specific earnings, provided that receipt of earnings from the same employer resumes the following year. In other words, an individual observed with, say, three consecutive years of earnings from a specific employer, followed by a year with no earnings from that employer, and then a subsequent year with earnings from that same employer, is defined as having continuous employment with that firm. This allows for the possibility that individuals take time off to have children, raise families, return to school, attend to health issues, and so on.[5] Nonetheless, when two or more consecutive years go by with no earnings from the employer

3. It is worth noting that labour force participation rates among older Canadians reached a low point between the mid- to late 1990s, declining to 85.7% among men aged 50 to 54 in 1998, to 70.7% among men aged 55 to 59 in 1998, and to 43.4% among men aged 60 to 64 in 1995. The men and women in our sample were aged 46 to 54 over this period, and hence less likely than their older counterparts to leave the labour force during this period.
4. Spells of unincorporated self-employment (i.e., spells of net self-employment income reported on the T1 tax form) are identified and included in the analysis. However, some measurement issues must be noted. Individuals observed in continuous spells of unincorporated self-employment may have closed one business and opened another and, in this respect, have changed jobs. Such changes cannot be identified and may result in an undercounting of employment spells. Conversely, unincorporated self-employed individuals who subsequently incorporate their business and pay themselves wages and salaries (i.e., T4 earnings) cannot be differentiated from unincorporated self-employed individuals who close their business and take paid employment in another firm. Both cases are counted as two employment spells.
5. Late filing may also be responsible for some observed gaps.

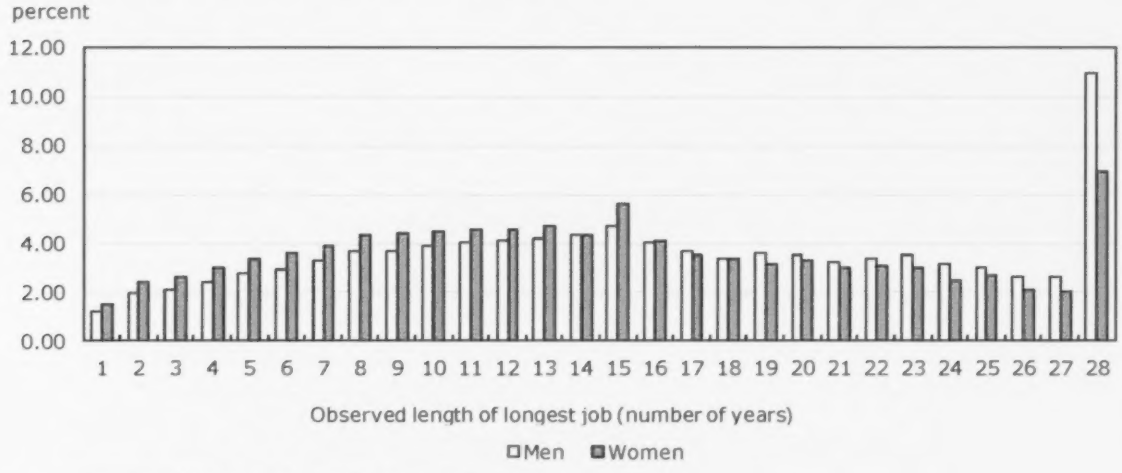
and then earnings subsequently resume, a second employment spell is said to start.[6] In the discussion below, the terms 'employment spell' and 'job' are used interchangeably.

For each individual in the sample, the lengths of all employment spells are calculated, and the longest one is flagged. If two employment spells have the same length, the one held most recently is flagged. If multiple spells with the longest duration exist concurrently and end in the same year, the one with the higher cumulative earnings is taken as the longest job.

The distributions of men and women across the longest employment spell observed are shown in Chart 1. Somewhat larger shares of men than women are observed in employment spells lasting 19 or more years.[7] Still, the distributions are not all that different between men and women, reflecting the extent to which women in this generation spent a large portion of their adult lives in the workforce.[8]

Chart 1

Distribution of observed length of longest job



Source: Statistics Canada, Longitudinal Worker File.

The shapes of the distributions do not point to any obvious thresholds around which job duration categories could be defined. However, a 12-year threshold is purposefully applied in order to facilitate comparisons with the research literature. Many studies of retirement take as their starting point the 'career jobs', or 'long-term jobs', held by older workers, defined as jobs lasting ten years or more (e.g.: Cahill et al. 2006; Weckerle and Shultz 1999).[9] Given the annual nature of LWF data, an employment spell observed over ten consecutive years may have lasted little more than eight years if, for example, it commenced in December of year 1 and ended in January of year 10. To better approximate a ten-year threshold, employment spells lasting less than, or more than, 12 years are identified. The sample is further subdivided into groupings of approximately six years, as shown in Table 2. The intent is not to stake out and defend a specific definition of long-term employment, but rather to use employment duration as a

6. Fewer than 5% of worker-employer spells are characterized by a break of two years or more when only paid employment is considered. Self-employment income is more frequently characterized by gaps of two years or more in income from that source. Whether this reflects true employment changes or ongoing fluctuations in the self-employment activity cannot be said.
7. The spike at observed job duration of 28 years represents workers who spent 28 years or more with the same employer, and these job spells are likely both left-hand and right-hand censored in the 28-year LWF panel.
8. However, readers will recall that women were almost twice as likely as men to be excluded from the sample because they did not have any earnings over the four years from 1983 to 1986.
9. The 10-year threshold is also used in tables presented in Labour Force Survey Annual Averages.

transparent framework within which to present other employment measures. The use of alternative duration categories would yield estimates on the summary measures that would be predictably different.

Distributions across the categories are shown in Table 2.[10] At the low end, 12% of the cohort had a longest employment spell of one to five years, while at the high end 17% had a longest spell of 25 to 28 years. Using the Health and Retirement Study in the United States, Cahill et al. (2006) reported that 64.6% of Americans aged 51 to 61 in 1992 with any work experience past age 49 worked in long-term jobs (defined as those lasting 10 years or more with at least 1600 hours worked per year, i.e., full-time jobs). Applying the 12-year threshold to the LWF yields an incidence of long-term employment of 65% in Canada—67% among men and 62% among women.[11]

Table 2

Distribution of workers across longest observed employment duration categories

Longest observed employment duration over the 1983-to-2010 period	Men	Women	Total
		percent	
1 to 5 years	10	13	12
6 to 11 years	21	25	23
12 to 18 years	28	30	29
19 to 24 years	20	18	19
25 to 28 years	19	14	17
Total	100	100	100

Source: Statistics Canada, Longitudinal Worker File.

Another benchmark against which to compare the above distribution is job tenure among employed respondents in the Labour Force Survey (LFS). Among employed (LFS) respondents aged 55 to 64 in 2010, 58% of men and 56% of women were working for an employer they had been with for 11 years or longer (Table 3).

Table 3

Distribution of job tenure among employed individuals aged 56 to 64

	2005		2010	
	Men	Women	Men	Women
		percent		
1 to 5 years	26	28	27	26
6 to 10 years	16	18	14	17
11 to 20 years	21	27	21	25
21 years plus	37	27	37	31

Source: Statistics Canada, Authors' calculations based on CANSIM table 282-0038, Labour Force Survey.

10. Table 6 presents the corresponding distribution when the sample restriction requiring workers to be present in the LWF between 1983 and 1986 is lifted.
11. This does not include the additional restrictions that Cahill et al. (2006) imposed on their sample. If long-term employment is defined as at least ten years of earnings from the same firm or organization, 74% of our sample is employed in such employment—76% of men and 71% of women.

3 Summary measures of the working lives of Canadian baby boomers

Using the duration of longest employment as an organizing framework, summary information on the employment experiences of older baby boomers is presented in Tables 4 and 5, for men and women, respectively.

Beginning with individuals whose longest job lasted five years or less, summary measures indicate that labour force attachment was typically quite limited. On average, individuals in this group had earnings of $1,000 or more in about 7 to 9 years over the period, and average annual earnings of the median worker during these years were modest, at about $16,300 among men and $8,600 among women. Together, limited employment and modest annual earnings yield modest cumulative earnings over the 28-year period, with medians of around $111,200 and $57,000 among men and women, respectively. By definition, all jobs were fairly short. The longest observed employment spell averaged 3.3 years, while the second-longest averaged about 2.5 years (conditional on a 2nd job being observed). In fact, of all jobs held by individuals in this group, over half (57%) were no more than one year in (observed) duration. Limited attachment to the workforce is further evidenced by the fact that individuals in this group typically exited their longest job at age 45, and were last observed with earnings at about 49 years of age. The Longitudinal Worker File (LWF) contains little information on why they left the workforce. Overall, these individuals had fairly marginal attachment to the workforce through the latter half of their working lives.

The second group, consisting of individuals whose longest job was observed for 6 to 11 years, differs in important ways from the previous one. Although the average duration of the longest job was less than 9 years, individuals in this group had fairly sustained involvement in the workforce. On average, they had earnings of $1,000 or more in almost 20 of the 28 years, and were last observed with earnings at about 58 years of age. Yet, in spite of this workforce attachment, individuals in this group typically worked for almost nine different employers over the period. In this respect, they experienced considerable employment mobility. Some of their jobs ended involuntarily, with layoffs more prevalent among men than among women. On average, men in this group experienced 2.8 permanent layoffs and 2.6 temporary layoffs over the period,[12] and received Employment Insurance income in 5.7 years. During the years they worked, average annual earnings of the median worker in this group were about $36,200 among men and $19,500 among women.[13] Further up the earnings distribution (80th percentile), men appear to have fared reasonably well, with annual earnings of about $60,300 and total cumulative earnings of $1.3 million. Overall, individuals in this group may be considered 'mobile workers', with sustained workforce participation and relatively high job mobility over the reference period.

12. Layoffs were counted over the period from 1983 to 2008 since, in later years, it is not possible to distinguish with confidence between permanent and temporary layoffs.
13. The LWF does not currently contain information on sources of income such as tips and commissions.

Table 4
Characteristics of working lives by observed duration of longest job — Men

	Duration of longest job observed					Total
	1 to 5 years	6 to 11 years	12 to 18 years	19 to 24 years	25 to 28 years	
Average number of years with earnings >= $1,000	8.7	20.4	24.1	24.8	26.6	22.3
Average number of years with T4 earnings >=$1,000	8.4	19.0	22.2	23.0	24.0	20.6
Average duration of longest job observed (number of years)	3.3	8.7	14.9	21.5	27.1	16.0
Percent of longest job spells left-hand censored, 1983	25.6	22.9	36.8	55.5	85.4	45.8
Percent of longest job spells potentially left-hand censored, 1984	8.1	3.7	2.7	2.6	5.7	4.0
Percent of longest job spells right-hand censored, 2010	5.0	17.3	26.5	27.6	69.9	30.8
Percent of longest job spells potentially right-hand censored, 2009	1.6	2.8	3.2	3.6	10.5	4.4
Percent of longest jobs held at age 50	4.7	24.8	71.8	100.0	100.0	65.8
Average age first observed in longest job (number)	42.3	44.3	41.4	37.9	35.5	40.3
Average age last observed in longest job (number)	44.6	51.9	55.3	58.4	61.6	55.3
Average age last received T4 earnings (number)	48.3	57.5	59.2	59.4	60.3	57.9
Average age last received T4 earnings or self-employment income (number)	49.0	58.6	60.4	60.6	61.8	59.1
Average duration of second-longest job observed (number of years)	2.5	5.8	7.8	6.1	6.2	6.2
Average number of employers	8.3	9.6	6.0	4.0	2.9	6.0
Median number of employers	5.0	8.0	5.0	3.0	2.0	4.0
Percent of longest jobs ended in lay-off, 1983 to 2008	17.7	13.8	7.3	4.8	1.3	8.1
Average number of permanent layoffs, 1983 to 2008	2.4	2.8	1.3	0.6	0.3	1.4
Average number of temporary layoffs, 1983 to 2008	1.0	2.6	2.1	1.7	1.4	1.9
Percent who experienced no permanent layoffs, 1983 to 2008	43.4	37.4	57.5	72.9	85.0	60.1
Percent who experienced no temporary layoffs,1983 to 2008	66.0	51.3	61.5	69.3	75.7	64.1
Percent who experienced no layoffs, 1983 to 2010	39.0	29.0	44.3	57.1	67.4	47.5
Average number of years received Employment Insurance income	4.1	5.7	3.8	2.5	2.0	3.6
Cumulative T4 earnings (dollars)						
At the 20th percentile	24,476	303,212	619,318	850,054	438,231	312,450
At the 50th percentile	111,214	692,263	1,111,377	1,333,624	1,429,767	1,030,432
At the 80th percentile	333,692	1,307,924	1,722,548	1,862,346	2,100,509	1,724,017

See note at end of table.

Table 4

Characteristics of working lives by observed duration of longest job — Men (concluded)

	Duration of longest job observed					Total
	1 to 5 years	6 to 11 years	12 to 18 years	19 to 24 years	25 to 28 years	
Average annual T4 earnings (conditional on having T4 earnings) (dollars)						
At the 20th percentile	6,664	20,568	30,473	37,817	34,088	24,100
At the 50th percentile	16,333	36,247	48,698	55,468	56,241	46,311
At the 80th percentile	34,797	60,348	71,994	76,168	79,744	71,050
Percent workers with no self-employment income, 1983 to 2010	62.5	44.3	48.1	55.3	50.0	50.6
Percent workers with only non-zero net self-employment income, 1983 to 2010	2.2	0.8	0.7	0.9	6.5	2.0
Average number of years with self-employment income	1.2	3.5	4.6	4.7	8.6	4.8
Average number of years of pensionable service under a registered pension plan	0.7	3.7	7.4	10.4	10.8	7.2
Percent workers whose longest jobs were held in the public or near-public service	12.0	12.4	22.0	27.9	27.1	21.1

Source: Statistics Canada, Longitudinal Worker File.

Table 5
Characteristics of working lives by observed duration of longest job — Women

	Duration of longest job observed					Total
	1 to 5 years	6 to 11 years	12 to 18 years	19 to 24 years	25 to 28 years	
Average number of years with earnings >= $1,000	7.4	18.7	23.0	24.4	26.5	20.6
Average number of years with T4 earnings >=$1,000	7.4	17.6	21.8	23.2	25.5	19.7
Average duration of longest job observed (number of years)	3.3	8.6	14.8	21.4	27.0	14.6
Percent of longest job spells left-hand censored, 1983	23.3	19.3	32.8	44.3	79.4	36.6
Percent of longest job spells potentially left-hand censored, 1984	7.8	3.8	3.4	3.6	7.2	4.6
Percent of longest job spells right-hand censored, 2010	4.4	16.4	25.4	32.3	68.5	27.6
Percent of longest job spells potentially right-hand censored, 2009	1.4	2.6	3.3	4.4	10.7	4.1
Percent of longest jobs held at age 50	5.3	26.6	72.5	100.0	100.0	61.0
Average age first observed in longest job (number)	42.4	44.4	41.5	38.3	35.6	41.0
Average age last observed in longest job (number)	44.7	52.0	55.3	58.7	61.5	54.6
Average age last received T4 earnings (number)	48.1	56.8	59.0	59.5	61.0	57.4
Average age last received T4 earnings or self-employment income (number)	48.8	57.8	59.9	60.5	61.7	58.3
Average duration of second-longest job observed (number of years)	2.5	5.6	7.4	5.6	5.3	5.8
Average number of employers	6.3	7.9	5.4	3.9	2.7	5.5
Median number of employers	4.0	7.0	5.0	3.0	2.0	4.0
Percent of longest jobs ended in lay-off, 1983 to 2008	12.9	11.2	7.3	5.0	1.7	7.8
Average number of permanent layoffs, 1983 to 2008	0.9	1.1	0.6	0.3	0.2	0.7
Average number of temporary layoffs, 1983 to 2008	0.5	1.5	1.7	1.4	1.4	1.4
Percent who experienced no permanent layoffs, 1983 to 2008	54.9	46.7	63.5	76.6	88.7	64.0
Percent who experienced no temporary layoffs,1983 to 2008	74.6	57.9	63.9	70.7	75.6	66.6
Percent who experienced no layoffs, 1983 to 2010	48.2	34.9	47.2	58.9	68.4	49.2
Average number of years received Employment Insurance income	3.1	4.8	3.6	2.6	2.1	3.5
Cumulative T4 earnings (dollars)						
At the 20th percentile	12,555	155,613	360,055	520,376	631,643	167,159
At the 50th percentile	56,987	344,058	684,499	876,373	1,045,897	577,139
At the 80th percentile	162,292	693,135	1,119,043	1,299,098	1,558,328	1,101,223

See note at end of table.

Table 5

Characteristics of working lives by observed duration of longest job — Women (concluded)

	Duration of longest job observed					Total
	1 to 5 years	6 to 11 years	12 to 18 years	19 to 24 years	25 to 28 years	
Average annual T4 earnings (conditional on having T4 earnings) (dollars)						
At the 20th percentile	3,537	10,893	17,659	22,729	25,844	12,550
At the 50th percentile	8,631	19,523	30,181	36,052	39,655	27,014
At the 80th percentile	17,644	33,405	47,888	53,522	58,078	45,672
Percent workers with no self-employment income, 1983 to 2010	71.3	55.2	61.1	63.7	65.9	62.0
Percent workers with only non-zero net self-employment income, 1983 to 2010	1.4	0.5	0.4	0.6	2.5	0.9
Average number of years with self-employment income	0.9	2.5	3.0	3.3	4.2	2.8
Average number of years of pensionable service under a registered pension plan	0.3	3.0	7.6	10.4	12.6	6.7
Percent workers whose longest jobs were held in the public or near-public service	21.0	27.9	43.6	49.9	53.9	39.3

Source: Statistics Canada, Longitudinal Worker File.

The next three groups include individuals whose longest observed employment spell was 12 years or longer. By definition, individuals in these jobs had sustained attachment to the workforce, with earnings of $1,000 or more typically received in at least 24 of the 28 years. There are variations in the observed duration of the longest job within the three duration groups, from about 15 years at the low-end to 27 years at the high-end. However, the issue of left-hand censoring is more influential among these long-term-job holders than among the groups discussed above, as 36.8% to 85.4% of the longest employment spells observed among men were already in progress when first observed at the start of the reference period (in 1983). Similarly, right-hand censoring is also a consideration as 26.5% to 69.9% of the longest employment spells observed among men were still in progress at the end of the reference period (in 2010). Consequently, the **observed** duration of these long-term jobs underestimates their **actual** duration, but by how much cannot be determined.

Considering employment mobility, long-term-job holders typically worked for about three to six different employers over the period, including jobs held before or after their long-term job as well as jobs held concurrently with it, as in the case of holding multiple jobs, or 'moonlighting'. Layoffs were typically not a recurring event during the working lives of long-term-job holders, with men experiencing 0.3 to 1.3 (permanent) layoffs over the 26 years and women experiencing 0.2 to 0.6 layoffs. Nonetheless, about 1% to 7% of individuals saw their long-term job end as a result of a layoff.

Among men in long-term jobs, average annual earnings of the median worker ranged from about $49,000 to $56,000, and median cumulative earnings ranged from $1.1 million to $1.4 million. Towards the upper end of the distribution (80th percentile), average annual earnings of men in long-term jobs ranged from $72,000 to almost $80,000. Annual and cumulative earnings among women are below those of men, but above those of women with more mobile or marginal workforce attachment. Job quality is also evident in terms of inclusion in a registered pension plan (RPP). While mobile workers typically accumulated 3 to 4 years of pensionable service over the 20 years for which data are available, longer-term-job holders

typically accumulated 7 to 13 years. Among those whose longest job is observed for 19 or more years, accumulated pensionable service averaged 10 to 13 years (again, out of the 20 years for which data are available).

Among men, about one-fifth to one-quarter of those in long-term jobs were employed in the public sector (i.e., federal, provincial, or municipal government) or the near-public sector (i.e., education, health care, and social services). Conversely, about three-quarters of them were employed in the private sector, broadly defined as all other sectors. The public and near-public sectors were a more important site of long-term employment for women in the baby boom generation. Indeed, across the three duration categories of 12 years or more, 44% to 54% of women worked in these sectors.

Overall, the majority of the baby boom generation spent their working lives in what is termed 'long-term employment' in this study. When this term is defined using a restrictive definition—19 or more years observed with the same employer—about one-third of the sample is included in this group. These individuals appear to be approaching retirement on a 'stable employment platform' characterized by sustained employment with a single firm, relatively few layoffs or job changes, relatively high life-time earnings, and, in many cases, sustained RPP coverage. When defined using a less restrictive definition—12 years or more observed with the same employer—about two-thirds of the sample had long-term employment (67% of men and 62% of women). This less restrictive definition is accompanied by greater variability across summary measures. Note again that individuals in this study are first observed during their 30s, and therefore when they are past the age of highest job mobility. Morissette et al. (2013) show that hiring rates are around 51% for men and women aged 15 to 24, but drop to around 26% among individuals aged 25 to 34, and further to around 17% among those aged 35 to 44.[14]

4 Job stability through the 1990s and 2000s

Given the considerable differences in the summary measures across these employment duration groups, one question that arises is whether the incidence of long-term employment has changed over time. Are younger baby boomers any more, or any less, likely than older baby boomers to enter their fifties in long-term employment? To answer this question, a discrete-time hazard model with a nonparametric baseline hazard function is estimated using a standard logistic regression framework. The model includes a series of dummies for duration of a job in years (the baseline hazard function), a series of dummies for the calendar year in which a job started, interaction terms between the duration and year dummies, a series of dummies for worker's age at the start of the job and a gender dummy.

A slightly different definition of an employment spell is used in this than in earlier sections, as a job is treated as having ended in year t if it is observed in year t but not in year $t+1$. Any subsequent spells that a worker has with the same employer are excluded from analysis. Information from year 2010 is used to determine job status in 2009. All job spells observed in both 2009 and 2010 are censored at 2009. The sample for this analysis consists of all new job spells observed between 1985 and 2009.[15] By focusing on new spells, the left-censoring problem associated with employment spells in progress is avoided. Right-censoring is taken into

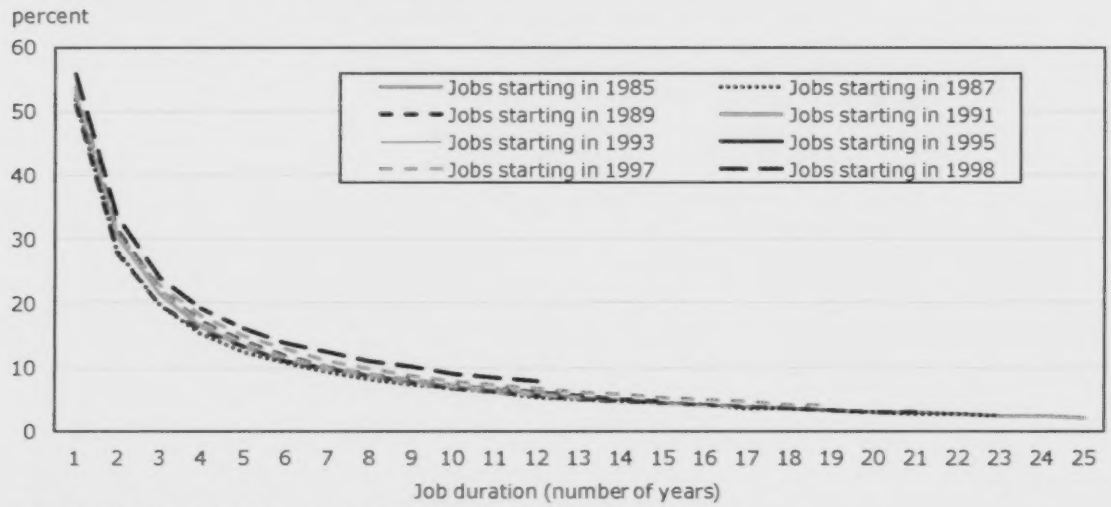
14. These estimates are for the time period 2000 to 2008; the study further shows there are no long-term trends in hiring or reallocation rates.
15. Although jobs are no longer allowed one-year gaps in order to be considered a single job spell, one-year gaps may represent a legitimate extended leave from a job or may be the result of late filing on the part of a company (T4 records filed late would not appear in the Longitudinal Worker File (LWF)). Spells first observed in the data base in 1984 may not have started that year, but rather some time before 1983, the first year of LWF. For that reason, only jobs first observed in 1985 or later are included in the analysis. At the same time, this study may have inaccurately declared some spells as completed, when in fact they were not.

account in one portion of the likelihood function of the model. Self-employment spells are excluded from analysis. The sample is also expanded to include workers aged 25 to 50 at the start of the spell.

Using the estimated coefficients, survival functions are computed for jobs starting in different years. The full set of survival rates is presented in Tables 7 and 8. Chart 2 presents selected survival curves for starting points which allow jobs to be (potentially) observed until at least year 12, the threshold for long-term jobs adopted in this study. The results suggest that between 5.3% and 6.5% of jobs that started between 1985 and 1997 lasted at least 12 years. This estimate jumps to 7.6% in 1998, representing jobs that reached their 12th year in 2009. The key message, however, is that the likelihood of a newly created employer–employee match resulting in a long-term employment spell did not decline between the mid-1980s and the late 1990s.

Chart 2

Survival functions for jobs starting in selected years



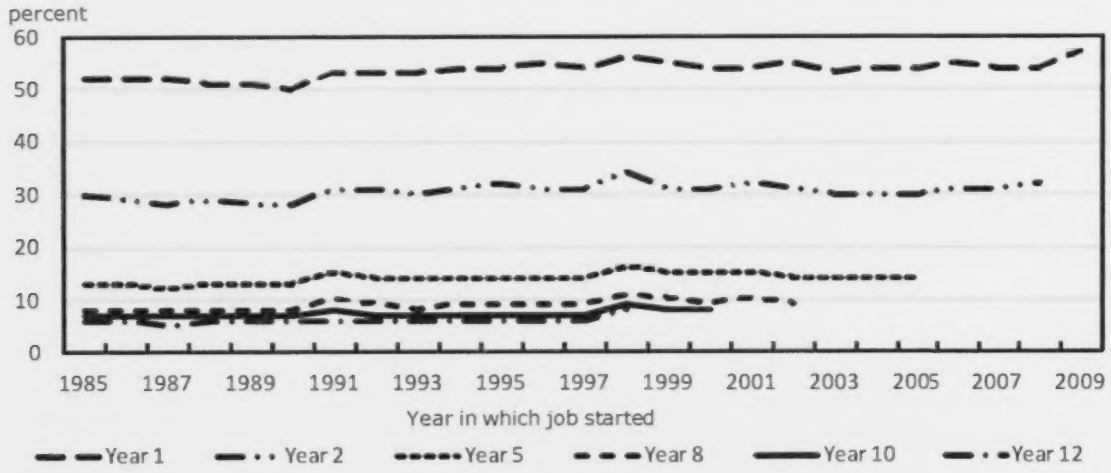
Sources: Statistics Canada, Longitudinal Worker File.

The most recent start year from which a job can be observed in the LWF until its 12th year is 1998; but what about jobs that started more recently than that? One might argue that, if no substantial changes over time are observed in the survival rate of jobs at lower durations, there is no reason to suspect a substantial change at year 12, all else equal. To get a sense of whether the probability of a job surviving to year 12 is likely to have changed among more recent job starts, the paper examines trends in the survival rates of jobs observed for fewer years. Chart 3 shows the percentage of spells that survive to at least *n* years, by year in which the jobs started. The results suggest that the share of jobs that survived to year 8 is no smaller among jobs that started in the beginning of the 2000s than among those that started in the 1990s or the second half of the 1980s. Similarly, there is no decline in the share of jobs that made it to at least year 5. These results are consistent with Brochu (2012) and Morissette et al. (2012). The evidence in Chart 3 also suggests that the higher rate of survival to year 12 among jobs that started in 1998 is a single-year phenomenon, as survival rates at shorter durations (e.g., 2 years and 5 years) are also higher that year but return to levels consistent with historical trends in subsequent years.

Charts 4 and 5 reproduce Chart 3 separately for men and women. Aside from the fact that women generally appear to stay in jobs longer than men, no gender-specific trend in job duration is evident.

Chart 3

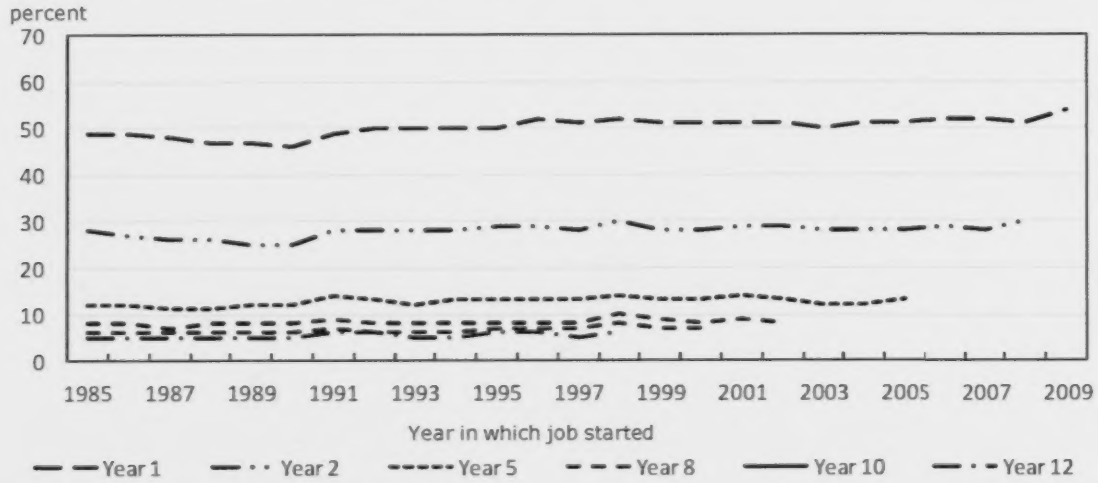
Percent of employment spells ongoing at different durations by start year



Source: Statistics Canada, Longitudinal Worker File.

Chart 4

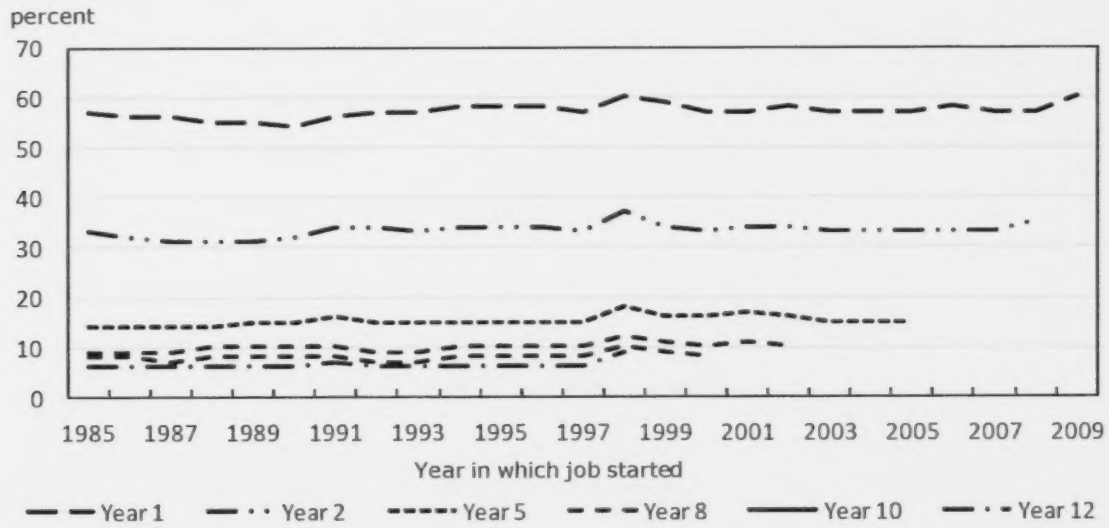
Percent of employment spells ongoing at different durations by start year — Men



Source: Statistics Canada, Longitudinal Worker File.

Chart 5

Percent of employment spells ongoing at different durations by start year — Women



Source: Statistics Canada, Longitudinal Worker File.

5 Conclusion and implications

Using observed duration of individuals' longest job as an organizing framework, this paper has provided an overview of the working lives of Canadians at the leading edge of the baby boom generation.

About two-thirds of the baby boomers entered their fifties in a long-term job, defined as employment that had lasted 12 years or more. In fact, most had worked for the same firm or organization for far longer—often twenty years or more—and even this is an underestimation since most started their longest job prior to the start of our reference period. The prevalence and duration of long-term jobs among this cohort suggest that the working lives of most baby boomers were quite stable. The fact that at least 50% of long-term-job holders did not experience a single permanent or temporary layoff over the 28-year period is further evidence of this stability. Although hiring and separation rates calculated for the entire workforce show a high degree of worker reallocation, this is most prevalent among workers under 35 years of age (Morissette et al. 2013). By the time individuals are age 35 or older, most have sorted themselves into jobs that they are likely to hold for many years.

This has a number of implications. For researchers investigating the employment dynamics of older workers, the termination of a long-term job does provide a clean conceptual and empirical starting point. Simply put, what do older workers do after leaving the job they have held for much of their working lives? While useful, such a starting point excludes the approximately one-third of the workforce with more mobile or marginal employment histories. Furthermore, there is no reason to believe that retirement decisions and preparedness among workers entering their fifties in long-term employment can be generalized to all workers. The retirement transitions of those more mobile workers may be of particular interest to policy makers.

About one-quarter of the sample consists of what are termed 'mobile workers' in this study. In spite of their sustained attachment to the workforce, these individuals had more employment changes than the long-term job holders above. This mobility is evident throughout their working lives, with multiple employment changes evident among both men and women through their thirties, forties, and fifties. Compared to long-term-job holders, mobile workers have lower annual earnings, lower cumulative earnings, and fewer years of pensionable service. Nonetheless, mobile workers at the upper end of the earnings distribution appear to have fared reasonably well in terms of annual and cumulative earnings.

As well, just over one-tenth of the sample consists of what are termed 'marginally attached workers' in this study. These individuals had limited participation in the workforce, short-term employment, and low annual and cumulative earnings.

Finally, evidence from the Longitudinal Worker File does not indicate that there has been any decline over time in the incidence of long-term employment or, conversely, an increase in the extent to which individuals' working lives are becoming more mobile.

6 Appendix

Table 6

Distribution of workers across longest observed employment duration categories

Longest observed employment duration over the 1983-to-2010 period	Men	Women	Total
		percent	
1 to 5 years	16	19	17
6 to 11 years	22	26	24
12 to 18 years	27	28	27
19 to 24 years	19	16	17
25 to 28 years	17	11	14
Total	100	100	100

Note: Sample: Individuals aged 33 to 38 in 1983 with T4 earnings or non-zero net self-employment income at any point between 1983 and 2010.
Source: Statistics Canada, Longitudinal Worker File.

Table 7

Estimated job survival rates by year in which job started — Part 1

Duration in years	Year in which job started											
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
	proportion											
Year 1	0.525	0.521	0.517	0.510	0.511	0.497	0.527	0.532	0.533	0.536	0.538	0.550
Year 2	0.305	0.293	0.283	0.286	0.278	0.283	0.310	0.308	0.304	0.309	0.315	0.314
Year 3	0.214	0.205	0.198	0.196	0.197	0.204	0.228	0.219	0.217	0.223	0.221	0.224
Year 4	0.162	0.159	0.150	0.153	0.156	0.161	0.180	0.171	0.169	0.171	0.171	0.173
Year 5	0.132	0.128	0.123	0.127	0.130	0.131	0.149	0.141	0.135	0.139	0.140	0.139
Year 6	0.110	0.109	0.105	0.109	0.110	0.112	0.128	0.116	0.113	0.117	0.116	0.117
Year 7	0.096	0.096	0.091	0.095	0.096	0.098	0.110	0.099	0.097	0.100	0.100	0.101
Year 8	0.085	0.085	0.081	0.085	0.085	0.085	0.097	0.087	0.084	0.087	0.088	0.090
Year 9	0.077	0.077	0.073	0.076	0.075	0.075	0.087	0.077	0.074	0.078	0.079	0.081
Year 10	0.070	0.070	0.066	0.067	0.067	0.067	0.078	0.069	0.066	0.069	0.072	0.073
Year 11	0.064	0.064	0.059	0.061	0.061	0.060	0.071	0.063	0.060	0.063	0.066	0.066
Year 12	0.059	0.056	0.053	0.055	0.055	0.055	0.065	0.058	0.055	0.058	0.060	0.060
Year 13	0.052	0.051	0.049	0.051	0.050	0.051	0.061	0.053	0.051	0.053	0.055	0.054
Year 14	0.048	0.047	0.045	0.047	0.047	0.047	0.057	0.049	0.047	0.049	0.050	0.050
Year 15	0.044	0.043	0.042	0.044	0.043	0.044	0.052	0.046	0.043	0.044	0.046	...
Year 16	0.041	0.039	0.039	0.041	0.040	0.041	0.049	0.042	0.039	0.041	...	...
Year 17	0.038	0.036	0.036	0.038	0.038	0.038	0.045	0.039	0.036	...	...	...
Year 18	0.035	0.034	0.034	0.035	0.035	0.036	0.041	0.036	...	...	...	...
Year 19	0.032	0.031	0.031	0.033	0.033	0.032	0.039	...	...	...	...	...
Year 20	0.030	0.029	0.029	0.031	0.030	0.030	...	...	...	...	...	...
Year 21	0.028	0.027	0.027	0.028	0.028	...	...	...	...	...	...	...
Year 22	0.026	0.025	0.025	0.026	...	...	...	...	...	...	...	...
Year 23	0.024	0.023	0.023	...	...	...	...	...	...	...	...	...
Year 24	0.022	0.021	...	...	...	...	...	...	...	...	...	...
Year 25	0.021	...	...	...	...	...	...	...	...	...	...	...

Source: Statistics Canada, Longitudinal Worker File.

Table 8
Estimated job survival rates by year in which job started — Part 2

Duration in years	Year in which job started												
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
	proportion												
Year 1	0.538	0.558	0.549	0.540	0.538	0.545	0.533	0.539	0.536	0.548	0.544	0.540	0.571
Year 2	0.309	0.335	0.310	0.308	0.316	0.313	0.303	0.305	0.303	0.310	0.307	0.322	...
Year 3	0.221	0.240	0.222	0.223	0.230	0.226	0.214	0.217	0.216	0.220	0.226	...	...
Year 4	0.168	0.191	0.175	0.176	0.182	0.176	0.167	0.168	0.165	0.175	...	...	...
Year 5	0.136	0.161	0.146	0.146	0.150	0.144	0.136	0.136	0.138	...	...	...	...
Year 6	0.115	0.138	0.126	0.124	0.127	0.122	0.114	0.116	...	...	...	...	...
Year 7	0.100	0.122	0.110	0.107	0.111	0.105	0.100	...	...	...	...	...	...
Year 8	0.088	0.110	0.097	0.094	0.097	0.093	...	...	...	...	...	...	...
Year 9	0.079	0.100	0.087	0.083	0.088	...	...	...	...	...	...	...	...
Year 10	0.071	0.090	0.078	0.076	...	...	...	...	...	...	...	...	...
Year 11	0.065	0.082	0.072	...	...	...	...	...	...	...	...	...	...
Year 12	0.058	0.076	...	...	...	...	...	...	...	...	...	...	...
Year 13	0.053	...	...	...	...	...	...	...	...	...	...	...	...
Year 14	...	...	...	...	...	...	...	...	...	...	...	...	...
Year 15	...	...	...	...	...	...	...	...	...	...	...	...	...
Year 16	...	...	...	...	...	...	...	...	...	...	...	...	...
Year 17	...	...	...	...	...	...	...	...	...	...	...	...	...
Year 18	...	...	...	...	...	...	...	...	...	...	...	...	...
Year 19	...	...	...	...	...	...	...	...	...	...	...	...	...
Year 20	...	...	...	...	...	...	...	...	...	...	...	...	...
Year 21	...	...	...	...	...	...	...	...	...	...	...	...	...
Year 22	...	...	...	...	...	...	...	...	...	...	...	...	...
Year 23	...	...	...	...	...	...	...	...	...	...	...	...	...
Year 24	...	...	...	...	...	...	...	...	...	...	...	...	...
Year 25	...	...	...	...	...	...	...	...	...	...	...	...	...

Source: Statistics Canada, Longitudinal Worker File.

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